

CLAIMS IN CURRENT FORM

1-47. (CANCELED)

48. (PREVIOUSLY PRESENTED) A blood glucose monitoring system for monitoring a blood glucose level and for providing health-related information comprising:

- (a) a display device including a display screen which displays the blood glucose level as measured;
- (b) an audio speaker;
- (c) a processor configured to provide audio and visual signals to the audio speaker and display device respectively;
- (d) at least one built-in memory including read-only digital memory (ROM) or writeable digital memory (RAM), or both, having stored therein operation data and operation software routines for:
 - (i) controlling the blood glucose monitoring system;
 - (ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and
 - (iii) based on the comparing, guiding a user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, asking questions of the user, giving advice as to diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof;
- (e) at least one physiological data monitor configured to (i) provide a measurement signal representative of a physiological parameter of the user and (ii) operate while being

physically separated from said processor and outside a housing containing said processor;

30 (f) an interface coupled between the processor and the physiological data monitor to at least isolate electrically the physiological data monitor from the processor, wherein the electrically isolating interface is neither entirely disposed within said housing containing said processor nor any housing containing said physiological data monitor; and

35 (g) a program controller configured to:

(i) receive an input from the user;

40 (ii) enable the user to (1) make selections and (2) control one or more user functions of the blood glucose monitoring system;

45 (iii) provide detailed information to the user based upon (1) operations of the program controller as controlled by the user, (2) predetermined software routines and (3) the operation data stored within the blood glucose monitoring system; and

50 (iv) provide a control signal to the processor based upon the input, thereby to cause the health related information to be provided to the user based upon the measurement signal representative of the blood glucose level and the control signal,

55 (h) wherein the physiological parameter includes the blood glucose level and the physiological data monitor includes a blood glucose indicator.

49. (CANCELED)

50. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the interface includes:

5 (a) a signal receiver for receiving the measurement signal representative of the blood glucose level from the at least one physiological data monitor;

- (b) a converter for converting the measurement signal as received into a form acceptable to the processor; and
- (c) a processor controller for controlling the processor.

51. (PREVIOUSLY PRESENTED) A system for interactively monitoring a blood glucose level and for interactively providing health-related information comprising:

- (a) a glucose monitor adapted to measure the blood glucose level of a user and for generating a first signal in response to a measurement of the blood glucose level;
- (b) a processor (i) for receiving a second signal that is a function of the first signal, (ii) being contained within a housing, and (iii) configured to operate while being physically separated from said glucose monitor, said glucose monitor being disposed outside said housing containing said processor;
- (c) an interface coupled between the blood glucose monitor and the processor:
 - (i) for receiving the first signal from the blood glucose monitor;
 - (ii) for providing the second signal to the processor; and
 - (iii) configured to isolate electrically the user from the processor, wherein the electrically isolating interface is neither entirely disposed within said housing containing said processor nor any housing containing said glucose monitor;
- (d) a memory coupled to the processor for storing blood level data, the memory including read-only digital memory (ROM) or writeable digital memory (RAM), or both, having stored therein operation data and operation software routines for:
 - (i) controlling the system;

(ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

30 (iii) based on the comparing, guiding the user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, asking questions of the user, giving advice as to diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof;

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(e) a display system coupled to the processor for displaying a representation of the blood glucose level, so as to provide the health related information to the user in an interactive manner; and

(f) a program controller (i) enabling the user (1) to make selections and (2) to control one or more user functions of the system and (ii) providing detailed information to the user based upon (1) operations of the program controller as controlled by the user, (2) predetermined software routines and (3) the operation data stored within the system.

52. (PREVIOUSLY PRESENTED) The system according to claim 51, wherein the interface utilizes optical isolation.

53. (CANCELED)

54. (CANCELED)

55. (PREVIOUSLY PRESENTED) The system according to claim 48 wherein the program controller is hand-held.

56. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the program controller receives the input from the user through at least one push button switch.

57. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the health related information provided to the user includes moving images displayed on the display screen.

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58. (PREVIOUSLY PRESENTED) The system according to claim 57, wherein the health related information provided to the user further includes a comparison of measurements of the blood glucose level with previously stored measurements of the blood glucose level.

59. (PREVIOUSLY PRESENTED) The system according to claim 57, wherein the health related information provided to the user includes educational information.

60. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the blood glucose monitoring system is configured to store the particular information on the at least one built-in memory for later retrieval.

61. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the display device is a television display and the processor has at least one removable memory.

62. (PREVIOUSLY PRESENTED) A method for monitoring a physiological condition and for providing health-related information with a system, the method comprising:

5 (a) using at least one physiological data monitor to provide a measurement signal representative of a user physiological parameter;

10 (b) providing a processor to produce audio and visual signals for reproduction at an audio speaker and a display screen, respectively, and (i) providing said processor within a housing, (ii) operating said processor while being physically separated from said physiological data monitor, and (iii) said physiological data monitor being disposed outside said housing containing said processor;

15 (c) electrically isolating the processor and the physiological data monitor, wherein the electrical isolating occurs neither entirely within said housing containing said processor nor any housing containing said physiological data monitor;

(d) using a program controller to:

(i) receive an input from the user; and

(ii) provide one or more controller signals to the
upon the input from the user;

25 (e) in response to and based upon (i) the measurement signal representative of the user physiological parameter and (ii) the input from the user, having the processor cause the visual and audio signals of the health related information to be presented to the user,

(f) wherein the user physiological parameter includes a blood glucose level and the physiological data monitor includes a blood glucose indicator;

30 (g) providing, in a memory coupled to the processor, the memory including read-only digital memory (ROM) or writeable digital memory (RAM), or both, the blood glucose level and operation software routines for:

(i) controlling the system;

35 (ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

40 (iii) based on the comparing, guiding the user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, giving advice as the diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof; and

45 (h) further using the program controller (i) for enabling the user (1) to make selections and (2) to control one or more user functions of the system and (ii) for providing detailed information to the user based upon (1) operations of the program controller as controlled by the user and (2) predetermined software routines and (3) data stored within the system.

63. (CANCELED)

64. (PREVIOUSLY PRESENTED) The method according to claim 62, further comprising:

5 (a) receiving the measurement signal representative of the blood glucose level from the at least one physiological data monitor;

(b) converting the measurement signal as received into a form acceptable to the processor; and

(c) using a processor controller for controlling the processor.

65. (PREVIOUSLY PRESENTED) The method according to claim 62, wherein the electrical isolation is achieved by optical isolation.

66. (CANCELED)

67. (CANCELED)

68. (PREVIOUSLY PRESENTED) The method according to claim 62 wherein the program controller is hand-held.

69. (PREVIOUSLY PRESENTED) The method according to claim 62, wherein the program controller receives the input from the user through at least one push button switch.

70. (PREVIOUSLY PRESENTED) The method according to claim 62, wherein the health related information provided to the user includes moving images displayed on the display screen.

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71. (PREVIOUSLY PRESENTED) The method according to claim 70, wherein the health related information provided to the user further includes a comparison of measurements of the user physiological parameter with previously stored measurements of the user physiological parameter.

72. (PREVIOUSLY PRESENTED) The method according to claim 70, wherein the health related information provided to the user includes educational information.

73. (PREVIOUSLY PRESENTED) The method according to claim 62, further comprising storing the particular information in the memory for later retrieval.

74. (PREVIOUSLY PRESENTED) The method according to claim 62, wherein the display screen comprises a television, the visual

signals are reproduced on the television and the processor has at least one removable memory.

75. (PREVIOUSLY PRESENTED) An apparatus for interactively monitoring a blood glucose level and for interactively providing health-related information comprising;

a. a display device comprising a display screen;

5 b. a processor coupled to provide a visual signal to the display screen, wherein the processor is contained within a housing;

c. an electrically isolating interface device coupled to the processor;

10 d. a glucose monitor coupled to provide a measurement signal representative of the blood glucose level to the electrically isolating interface device, wherein the glucose monitor is (i) configured to operate while being physically separated from said processor and (ii) outside said housing containing said processor, wherein the electrically isolating interface device is neither entirely disposed within said housing containing said processor nor any housing containing said glucose monitor;

15 e. a controller coupled to provide a control signal to the processor based on an input of the user, so as to provide the health related information in an interactive manner; and

20 f. at least one built-in memory, including read-only digital memory (ROM) or writeable digital memory (RAM), or both, having stored therein operation data and operation software routines for:

(i) controlling the apparatus;

25 (ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

30 (iii) based on the comparing, guiding the user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, asking questions of the user, giving advice as to diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof; and

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g. a program controller configured to:

- (i) receive an input from the user;
- (ii) enable the user (1) to make selections and (2)

40 to control one or more user functions of the apparatus;

(iii) provide detailed information to the user based upon (1) operations of the program controller as controlled by the user, (2) predetermined software routines and (3) the operation data stored within the apparatus; and

45 (iv) provide a control signal to the processor based upon the input from the user, thereby to cause the health related information to be provided to the user based upon the measurement signal representative of the blood glucose level and the control signal.

76. (PREVIOUSLY PRESENTED) The apparatus according to claim 75 wherein the processor comprises a video game console.

77. (PREVIOUSLY PRESENTED) The apparatus according to claim 75 wherein the display device comprises a television set.

78. (PREVIOUSLY PRESENTED) The apparatus according to claim 75, further comprising:

a CD-ROM drive; and

5 an interchangeable compact disk removably coupled to the
CD-ROM drive for providing additional functionality to the
processor.

79. (PREVIOUSLY PRESENTED) The apparatus according to
claim 75 wherein the electrically isolating interface device
comprises:

- 5 a. means for receiving the measurement signal
representative of a blood glucose level;
- b. means for converting the measurement signal
representative of the blood glucose level into a form acceptable to
the processor coupled to the means for receiving; and
- 10 c. means for controlling the processor coupled to the
means for converting.

80. (CANCELED)

81. (PREVIOUSLY PRESENTED) An apparatus for
interactively monitoring a blood glucose level and for
interactively providing health-related information comprising;

- 5 a. a display device comprising a display screen and an
audio speaker;
- b. a processor contained within a housing and coupled
to provide a visual signal to the display screen;
- c. an electrically isolating interface device coupled
to the processor;
- 10 d. a glucose monitor coupled to provide a measurement
signal representative of the blood glucose level of a user to the
electrically isolating interface device, wherein the glucose
monitor is (i) configured to operate while being physically
separated from said processor and (ii) outside said housing
15 containing said processor, wherein the electrically isolating

interface device is neither entirely disposed within said housing containing said processor nor any housing containing said glucose monitor;

20 e. a controller coupled to provide a control signal to the processor based on an input received from the user, so as to provide the health related information to the user in an interactive manner based upon the measurement signal representative of the blood glucose level and the control signal;

25 f. at least one built-in memory, including read-only digital memory (ROM) or writeable digital memory (RAM), or both, having stored therein operation data and operation software routines for:

(i) controlling the apparatus;

30 (ii) comparing the blood glucose level as measured with stored measurements representative of normative blood glucose levels; and

35 (iii) based on the comparing, guiding the user through additional measurements, storing particular information for later retrieval or downloading, recommending a certain action be taken by the user, asking questions of the user, giving advice as to diet or exercise habits of the user, performing one or more further processing functions in response to the comparing, or combinations thereof; and

40 g. a program controller configured to:

(i) receive an input from the user;

45 (ii) enable the user to (1) make selections and (2) control one or more user functions of the apparatus;

(iii) provide detailed information to the user based upon (1) operations of the program controller as controlled by the user and (2) predetermined software routines; and

(iv) provide a control signal to the processor based upon the input, thereby to cause the health related information to

be provided to the user based upon the measurement signal representative of the blood glucose level and the control signal.

82. (PREVIOUSLY PRESENTED) The apparatus according to claim 81 wherein the processor comprises a video game console.

83. (PREVIOUSLY PRESENTED) The apparatus according to claim 81 further comprising:

a CD-ROM drive; and

5 an interchangeable compact disk removably coupled to the CD-ROM drive for providing additional functionality to the processor.

84. (PREVIOUSLY PRESENTED) The apparatus according to claim 81 wherein the electrically isolating interface device comprises:

5 a. means for receiving the measurement signal representative of the blood glucose level;

b. means for converting the measurement signal representative of a blood glucose level into a form acceptable to the processor coupled to the means for receiving; and

10 c. means for controlling the processor coupled to the means for converting.

85-95. (CANCELED)

96. (PREVIOUSLY PRESENTED) The system according to claim 48, further comprising one or more communication ports configured to connect the blood glucose monitoring system to an "information superhighway".

97. (PREVIOUSLY PRESENTED) The system according to claim 48, further comprising a slot for accepting a flash memory card.

98. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the blood glucose monitoring system is configured for downloading the particular information obtained from the user to a separate computer.

99. (PREVIOUSLY PRESENTED) The system according to claim 48, wherein the at least one built-in memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls out side a predetermined range.

100. (PREVIOUSLY PRESENTED) The system according to claim 51, further comprising one or more communication ports configured to connect the system to an "information superhighway".

101. (PREVIOUSLY PRESENTED) The system according to claim 51, further comprising a slot for accepting a flash memory card.

102. (PREVIOUSLY PRESENTED) The system according to claim 51, wherein the system is configured for downloading the particular information obtained from the user to a separate computer.

103. (PREVIOUSLY PRESENTED) The system according to claim 51, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls out side a predetermined range.

104. (PREVIOUSLY PRESENTED) The method according to claim 62, further comprising connecting to an "information superhighway".

105. (PREVIOUSLY PRESENTED) The method according to claim 62, further comprising accepting a flash memory card into a pre-configuration slot.

106. (PREVIOUSLY PRESENTED) The method according to claim 62, further comprising downloading the particular information obtained from the user to a separate server.

107. (PREVIOUSLY PRESENTED) The method according to claim 62, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls out side a predetermined range.

108. (PREVIOUSLY PRESENTED) The apparatus according to claim 75, further comprising one or more communication ports configured to connect the system to an "information superhighway".

109. (PREVIOUSLY PRESENTED) The apparatus according to claim 75, further comprising a slot for accepting a flash memory card.

110. (PREVIOUSLY PRESENTED) The apparatus according to claim 75, wherein the apparatus is configured for downloading the particular information obtained from the user to a separate computer.

111. (PREVIOUSLY PRESENTED) The apparatus according to claim 75, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls outside a predetermined range.

112. (PREVIOUSLY PRESENTED) The apparatus according to claim 81, further comprising one or more communication ports configured to connect the system to an "information superhighway".

113. (PREVIOUSLY PRESENTED) The apparatus of claim 81, further comprising a slot for accepting a flash memory card.

114. (PREVIOUSLY PRESENTED) The apparatus according to claim 81, wherein the apparatus is configured for downloading the particular information obtained from the user to a separate computer.

115. (PREVIOUSLY PRESENTED) The apparatus according to claim 81, wherein the memory further has stored therein alarm data and alarm software routines for triggering an alarm if the blood glucose level as measured falls outside a predetermined range.